

Table 1 Database Notes

Data Collection	<u>Data Logger:</u> <u>Data Collection Interval:</u> <u>Collection Method:</u>	Aegis DDC 15 – Minute FTP to data.cdhenergy.com
Site Information	<u>Cogeneration Units:</u> <u>Nameplate Capacity:</u> <u>Heat Recovery Medium:</u> <u>Heat Recovery Uses:</u> <u>Excess Heat:</u>	Aegen TP-75LE Induction w/ Inverter 75 kW Hot Water Domestic hot water/Space Heating Rejected to atmosphere by dump radiator
DG/CHP Generator Electrical Output	<u>Engineering Units:</u> <u>Energy Measurement (net/gross):</u> <u>Measurement Type:</u>	kWh Net Power (calculated from gross and parasitic measurements) Accumulated kWh
DG/CHP Generator Electrical Output Demand	<u>Engineering Units:</u> <u>Measurement Type:</u>	kW Calculated : accumulated kWh/int * # intervals
DG/CHP Generator Fuel Input	<u>Engineering Units:</u> <u>Measurement type:</u>	CF Accumulated cubic feet
DG/CHP Useful Heat Recovery	<u>Engineering Units:</u> <u>Heat Measurement Type:</u>	MBtu/hr Calculated from 15 minute analog flow and temperature data
DG/CHP Unused Heat Recovery	<u>Engineering Units:</u> <u>Heat Measurement Type:</u>	MBtu/hr Calculated from 15 minute analog flow and temperature data
DG/CHP Status/Runtime	<u>Engineering Units:</u> <u>Measurement Type:</u>	Hours Calculated based on generator output

Facility Purchased Energy	<u>Engineering Units:</u> <u>Measurement Type:</u>	kWh Accumulated kWh
Facility Purchased Demand	<u>Engineering Units:</u> <u>Measurement Type:</u>	kW Calculated : accumulated kWh/int * # intervals
Other Facility Gas Use	<u>Engineering Units:</u> <u>Measurement Type:</u>	- -

Table 2 Event Timeline

Date	Event
August 19, 2016	Data was sent to CDH Energy August 19, 2016
May 1, 2015	Website data begins August 26, 2016
February 12, 2019	System was shut down from 1/9/19 to 1/24/19 per Aegis. This resulted in a data gap on the NYSEERDA DER website.
September 24, 2020	Gas data stops.
October 21, 2022	Gas data stipulated, from 9/24/20 to present, using measured power and gas prior to gas meter failure. See Appendix – Gas Calc for details.

Range Checks

Table 3. Range Checks

Data Point	Units	Hourly Data Calculation Method	Database Lower Range	Database Upper Range	Notes
DG/CHP Generator Output (WG_d)	kWh/int	Sum	0	175	
DG/CHP Generator Output Demand (WG_KW_d)	kW	Max	0	175	$WG_KW_d = WG_d * \# \text{ Intervals}$
DG/CHP Generator Gas Use (FG_d)	cf/int	Sum	0	300	
Total Facility Purchased Energy (WT_d)	kWh/int	Sum	0	20	
Total Facility Purchased Demand (WT_KW_d)	kW	Max	0	1200	$WT_KW_d = WT_d * \# \text{ Intervals}$
Other Facility Gas Use (FT_d)	cf/int	-	-	-	
Useful Heat Recovery (QHR_d)	MBtu/hr	Avg	0	2500	
Unused Heat Recovery (QD_d)	MBtu/hr	Avg	0	2500	
Status/Runtime of DG/CHP Generator (SG_d)	hr	-	-	-	
Ambient Temperature (TAO)	°F	Avg	-30	120	<i>WUG Airport Code - NYC</i>

Notes:

1. This table contains values from *beresford.csv*

Beresford Apartments – Database Notes

Relational Checks

Table 4. Relational Checks

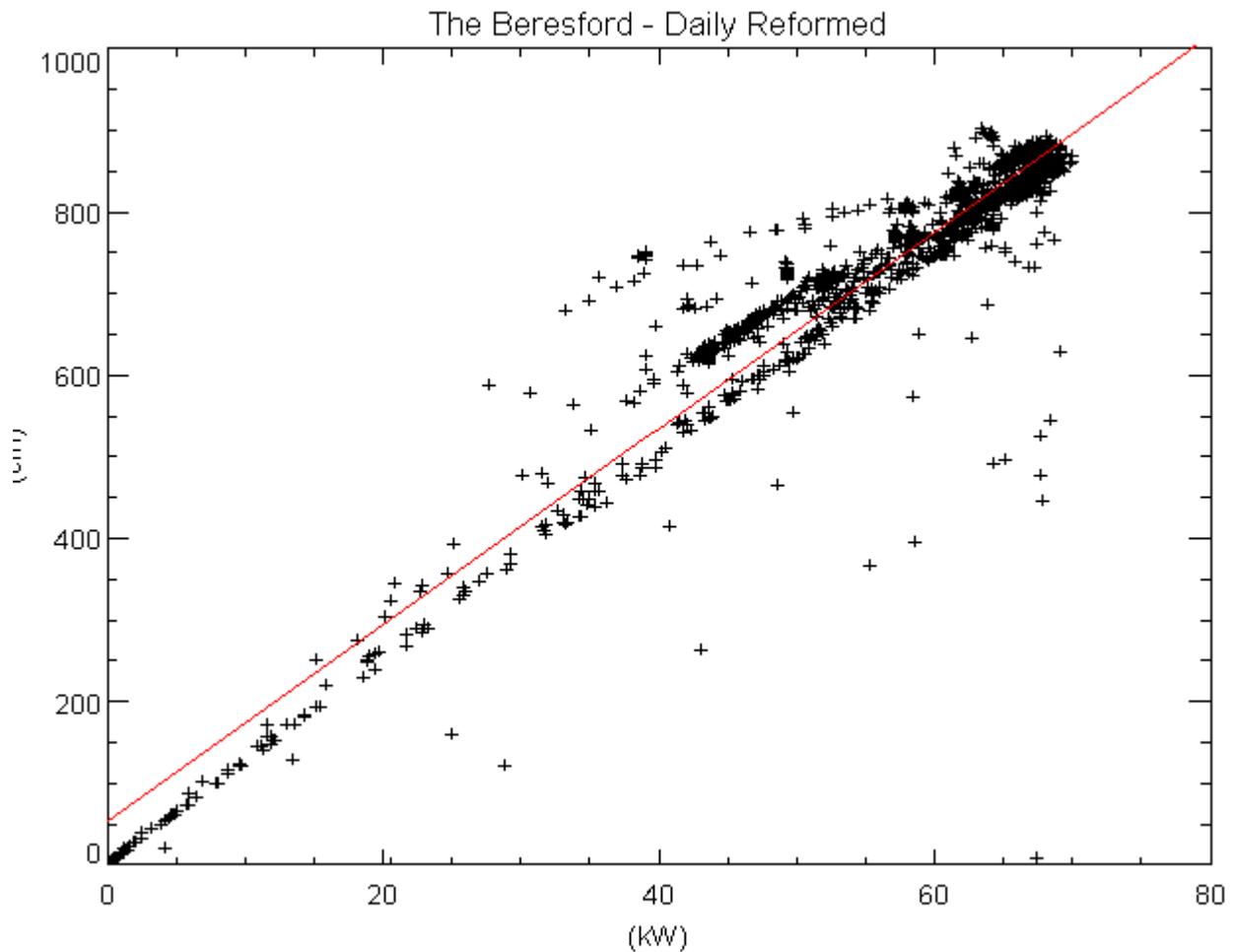
Evaluated Point	Criteria	Result

Notes:

1. This table contains values from *relational_checks.pro*

BERESFORD APARTMENTS – APPENDIX A

Gas data is calculated from power generation by using gas curve developed from the measured power and gas data, prior to the gas meter failure on 9/24/20, for the Aegen TP-75LE unit.



Power generation (WT_KW), gas consumption (FG):

$$FG = 12.01379(WT_KW) + 54.51330$$